



County Borough of Dewsbury.

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EDUCATION COMMITTEE.

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# ANNUAL REPORT

UPON THE

## SCHOOL MEDICAL WORK

For the Year 1923.

BY

Oscar M. Holden, M.D., D.P.H.,

School Medical Officer.

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DEWSBURY :

JOSEPH WARD AND CO., PRINTERS, CAXTON SQUARE.

1924.





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# DEWSBURY EDUCATION COMMITTEE.

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## SCHOOL MEDICAL STAFF.

### *School Medical Officer.*

OSCAR M. HOLDEN, M.D., Ch.B., D.P.H.

### *Assistant School Medical Officer.*

E. DOROTHY HAWKESWORTH, M.B., Ch.B., B.A.O.

### *School Dentist.*

E. A. ROGERSON, L.D.S. (part time).

### *School Nurses.*

NURSE E. A. ROBERTS, Out-door.

NURSE E. BUSHELL, do.

NURSE M. A. SWALLOW, In-door.

### *Clerical Staff.*

Chief Clerk (part time) E. AUTY (R.S.I. Cert.).

Junior Clerk (whole time) S. CROSS.

*To the Chairman and Members of the Dewsbury Education Committee.*

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MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present to you my Annual Report upon the School Medical Work carried out in the County Borough during the year 1923.

It follows upon the same lines as my Reports for previous years since 1920, but I have amplified several Tables, and also included particulars of special investigations commenced during the year.

No striking developments have taken place. The personnel of the staff has remained unchanged.

A perusal of the Report will show that the facilities you have provided for the medical supervision of the Elementary School Children of the Borough have been fully utilized; the numbers of children availing themselves of these facilities exceeding those for 1922 or for any previous year.

A scheme for the medical inspection of children attending the Wheelwright Grammar School was approved by you towards the end of the year; and a satisfactory commencement has already been made.

Payment by parents for services rendered at the School Clinic, according to a prescribed scale of income and charges, was also initiated upon the request of the Board of Education. As it has always been the policy of the School Clinic staff to refer children of parents who appear capable of paying to their private medical men, the amount of money received from patients under this scheme is very small. The vast majority of families, members from whom, attend the Clinic, have an income below the scale necessary to require payment.

I wish to thank my staff for their co-operation, and the manner in which they have worked during the year, and also you, Ladies and Gentlemen, for the courtesy and consideration you have extended to my department.

I have the honour to remain,

Your obedient servant,

OSCAR M. HOLDEN.

## THE ELEMENTARY SCHOOLS.

The following structural alterations were carried out in the schools during the year.

A Partition erected in the Mixed Department of the Dewsbury Moor Council School.

The following Schools were internally painted and decorated during the Midsummer Holidays :—

St. Joseph's R.C., Earlsheaton C. of E., Earlsheaton C., Chickenley Lane C., Victoria C., Batley Can C., Whitley Lower C. of E., West Town C. of E., Savile Town C. of E., Thornhill Lees Infants' C. of E., Thornhill C. of E., Lees Moor C. of E., Eastborough C., Shaw Cross C., Thornhill Lees Mixed C. of E., Carlton Road C., and Boothroyd Lane C. The Playground at St. Joseph's R.C. has been asphalted.

A Playing Field at Calder Bank has been rented by the Committee from the Managers for the Children of West Town C. of E. School. This is a very welcome addition to the playground facilities of this School. Situated as it is, the gradients of the School Playground are dangerous to scholars, and accidents have not been infrequent in the past.

For details of defects found in other schools, I would refer to my 1920 Report.

## SANITARY ACCOMMODATION IN SCHOOLS.

- 124 Pedestal W.C's. flushed with separate cisterns.
- 44 Pedestal W.C's. flushed with automatic cisterns.
- 5 Trough Closets with 25 seats, flushed automatically.
- 9 Trough Closets with 54 seats, flushed by hand.
- 15 Urinals with sparge pipes.
- 25 Urinals without sparge pipes.
- 8 Pail Closets—one school only. Sewerage is not available at this school.

The ideal accommodation is pedestal w.c's. flushed by hand from separate cisterns, and urinals fitted with sparge pipes flushed automatically. Hand flushing of urinals is never satisfactory. One closet to 15 girls and 25 boys should be provided. The accommodation available at present works out approximately at one closet for 33 children, including all types, and one water closet to 50 children, including only pedestal type. A total of 211 pedestal w.c's. would be required to bring the accommodation up to a satisfactory standard.



## COST OF THE SCHOOL MEDICAL SERVICE FOR THE YEAR 1923.

<i>Expenditure :—</i>	£	s.	d.	£	s.	d.
Salaries ... ..	1479	10	0			
Printing, Stationery, Postages and Advertising ... ..	67	14	5			
Drugs, Materials and Apparatus ...	94	14	8			
Spectacles ... ..	10	10	11			
Bacteriological Examinations ...	36	13	6			
Rent of Clinic ... ..	100	0	0			
Repairs and Upkeep of Clinic...	42	4	10			
Fuel, Light and Cleaning ...	40	10	2			
Telephone Charges ... ..	9	2	1			
Uniform Allowances to Nurses ...	24	0	0			
Travelling Expenses ... ..	3	10	0			
Miscellaneous ... ..	0	9	6			
				1909	0	1

*Income :—*

From Dewsbury Corporation—Part			
Salary of Assistant Medical Officer	150	0	0
From Parents for Spectacles ... ..	1	6	0
From Parents for Medical Treatment...	0	10	9
	151	16	9

*Net Cost of the Service for the Year 1923* ... £1,757 3 4

Taking the rateable value of the Borough as £305,636, and the estimated produce of a penny rate as £1,205, the cost to the Borough of the whole of the School Medical Service, deducting the 50% grant received from the Board of Education, was, in 1923, a rate of 0.73 pence. In 1921 it was 0.95 pence, and in 1922 0.78 pence.

The estimated population of Dewsbury for the middle of 1923 was 55,424. The School Children on the Registers (Elementary Schools only) numbered 8,454. The cost was, therefore, 3.8 pence per head of the population, and 2s. 1d. per child on the school registers. A total of 3,929 individual children were inspected in the schools, whilst the total number of medical and dental consultations, etc., was 41,747, not including 4,018 visits by nurses to the homes of children.

The average cost of each consultation, inspection or other procedure, including all necessary treatment at the School Clinic, works out at 5d., a similar figure to last year's.

## ROUTINE MEDICAL INSPECTIONS.

TABLE I.

NAME OF SCHOOL.	ENTRANTS. (Aged 5 years.)				INTERMEDIATES. (Aged 8-10 years).				LEAVERS. (Aged 12-14 years)			
	Number Examined		Parents Present.		Number Examined.		Parents Present.		Number Examined.		Parents Present.	
	M	F	M	F	M	F	M	F	M	F	M	F
Batley Carr C. ...	16	16	11	11	24	21	5	8	36	32	...	3
Boothroyd Lane C. ...	27	19	14	12	46	41	18	13	59	65	27	24
Carlton Road C. ...	18	26	6	14	43	34	18	17	54	41	20	20
Chickenley Lane C. ...	7	10	3	2	22	10	11	5	30	23	16	5
Dewsbury Moor C. ...	27	21	11	9	23	15	11	14	26	35	1	...
Dewsbury Parish C. of E. ...	...	...	...	...	11	...	2	...	22	...	8	...
Earlsheaton C. of E. ...	15	10	10	7	12	21	8	7	24	14	12	8
Earlsheaton C. ...	12	8	8	6	20	16	3	2	19	23	4	3
Eastborough C. ...	15	22	6	13	44	52	14	10	60	69	16	12
Ravensthorpe St. Saviour's C. of E.	35	40	18	19	63	48	19	23	65	103	16	28
St. John's C. of E. ...	8	12	4	8	10	11	3	7	27	31	19	7
St. Joseph's R.C. ...	6	8	...	...	13	12	3	4	16	17	...	...
St. Paulinus R.C. ...	18	13	11	5	34	29	2	2	38	38	2	2
Shaw Cross C. ...	8	5	3	1	4	9	1	5	...	16	...	7
Savile Town C. of E. ...	7	13	4	8	12	15	6	10	20	25	7	13
Thornhill C. of E. ...	12	13	10	11	26	17	16	13	46	27	22	7
Thornhill Edge C. of E. ...	9	9	8	9	...	10	...	7	...	10	...	5
Thornhill Lees C. of E. ...	20	20	16	12	32	22	12	7	59	45	17	13
„ Lees Moor C. of E. ...	15	13	10	11	...	23	...	16	...	37	...	18
Victoria Jubilee C. ...	16	15	15	8	24	23	8	2	33	48	3	6
Walker C. ...	...	...	...	...	13	2	4	...	32	7	10	2
West Town C. of E. ...	10	11	4	5	19	21	6	4	26	17	7	9
Whitley Lower C. of E. ...	5	7	4	6	6	8	4	4	14	7	3	2
	306	311	176	177	501	460	174	180	706	730	210	194

TABLE II.

	Number Examined.	Parents Present.	Percentage of Parents' Attendances.	Male.	Female.
Entrants ...	617	353	57.2	57.5	56.9
Intermediates ...	961	354	36.8	34.7	39.1
Leavers ...	1436	404	28.1	29.7	26.5
	3014	1111	36.5	37.0	36.7

Comparing the above figures, there were 173 fewer Entrants ; 27 more Intermediates ; and 656 more Leavers, examined this year than in 1922.

The large increase in the Leaver group is occasioned by the raising of the leaving age to 14 years. Two year groups were examined so as to avoid missing any children. In consequence, in 1924 the Leaver group will show a corresponding diminution in numbers examined.



The attendance of parents falls a little below that for last year, the decrease being most pronounced in the Leaver group. For Entrants, the attendance of parents was better than last year. It will be noticed that there are curious differences in the various schools. As might be expected, parents attend in largest numbers for the Entrant examination. It is unfortunate that more parents do not come with the Leaver group. Advice could be given regarding the choice of an occupation on leaving school; especially useful would this be in the case of children found to have respiratory, cardiac or ophthalmic defects.

Verbal instructions given to a parent, in the presence of her child, are more satisfactory than printed notices. When a parent has not attended the school nurse visits the home to explain any defect found, and to urge suitable remedies. The method used is to ask the parent to take her child to her private medical man. If this, for some reason or other, is not possible, attendance at the School Clinic is advised. At a later date the home is again visited to ascertain whether the advice has been carried out. Not infrequently nothing has been done, but the second interview usually materialises in the advice being taken.

As pointed out in my 1922 Report, the School Clinic is primarily intended for those in financially poor circumstances. During the year a system of payments was adopted and put into operation. The amount of money so received seems to indicate that the number not in financially poor circumstances who attend the Clinic is very small. Undoubtedly, did the School Clinic not exist, the majority of the minor disabilities occurring in school children attending the Elementary Schools would go untreated.

The teachers have brought forward children who appear to be ailing, and their continual co-operation is of the greatest value in carrying out efficiently the work of the School Medical Service. Especially useful have been the Weekly Returns of Children absent from school, which the majority of Head Teachers have sent in with unerring regularity. Their co-operation in this has simplified supervisory and following-up work immensely.

## FINDINGS AT ROUTINE MEDICAL INSPECTION.

## A.—GENERAL.

UNCLEANLINESS.—TABLE III.

CONDITION OF HEAD.					CONDITION OF BODY			
	Clean.	Nits.	Pedi- culi.	Percentg. Clean.	Clean.	Dirty.	Pedi- culi.	Percentage Clean.
Entrants—								
Boys ...	302	3	1	98·6	290	16	...	94·77
Girls ...	217	89	5	69·7	294	17	...	94·5
Intermediates—								
Boys ...	490	10	1	97·8	475	26	...	94·8
Girls ...	267	184	9	58·0	437	23	...	92·8
Leavers—								
Boys ...	698	8	...	98·8	663	43	...	93·9
Girls ...	510	211	9	69·8	697	33	...	95·4
Total ...	2484	505	25	82·4	2856	158	...	94·4

The above findings at routine inspections show that amongst boys of all groups, the percentage found to have dirty heads is 1.6, but amongst girls the figure rises to 34.2. Whilst the percentage dirty for boys is not unsatisfactory, that for girls leaves much to be desired. The Intermediate group, aged 8 to 10 years is the worst, but the number not clean in the Leaver group (12 to 14 years), is rather disquieting; for at this age the girls should be able to do much themselves, and it might be expected a certain feeling of personal pride in cleanliness would be dominant. Naturally, home circumstances play an important role in the production of this state of things, consequently, certain schools show better results than others. Housing in this town is not satisfactory, and in some of the homes, with their lack of bathing facilities, and overcrowding, it is nearly impossible to maintain a desirable standard of hygiene.

The effect of the long hair of girls is shown when comparing bodily cleanliness. In boys, it was found that 5.5 per cent. were unclean. In girls, the figure was 5.8 per cent. dirty. Here again the age period 8 to 10 years was the unsatisfactory one, but the figures for boys and girls are practically the same.

It is interesting to compare these figures with other districts. Taking London as an instance, in 1922, 79.3% of the 8 years old girls had perfectly clean heads, *i.e.*, over 20% more than the corresponding group in Dewsbury. Out of a total number of 2,158,100 children examined, 18.7% were found in an uncleanly condition. For Dewsbury, the corresponding percentage is 34.2.

There still remains much to be done in the direction of improving head cleanliness among girls. An experience common to most towns is that the same children repeatedly come under observation, and almost always it is found that home conditions are unsatisfactory. In some cases, the dirty condition is avoidable, and is due to parental carelessness and a deficient sense of house management, but in others the housing conditions are, I believe, the most to blame. There is no incentive, aesthetically or materially, for the parents to maintain a proper standard of cleanliness, in consequence, the adverse conditions are reflected in the children.

Comparison with the figures afforded in inspections carried out during the war period gives an interesting result. For the four years 1915 to 1918, inclusive, the average percentage in a state of satisfactory cleanliness of the head was, Boys, 99%, Girls, 65.5%.

It appears then, that, as far as personal cleanliness of school children is concerned, the war period exerted no effect. The figures being, for all purposes, identical.

CLOTHING AND FOOTGEAR (given in percentages).

TABLE IV.

		ENTRANTS.		INTERMEDIATES.		LEAVERS.		Total.
		Male.	Female.	Male.	Female.	Male.	Female.	
Clothing	Satisfactory ...	302	300	475	424	677	703	2881
	Unsatisfactory	4	11	26	36	29	27	133
	% Satisfactory	98.6	96.4	94.8	92.1	95.8	96.2	95.5
Footgear	Satisfactory ...	290	299	467	439	659	703	2857
	Unsatisfactory	16	12	34	21	47	27	157
	% Satisfactory	94.7	96.1	93.2	95.4	93.3	96.2	94.7

An improvement in clothing and footgear generally is noticed compared with 1922, as is shown in the following Table.

TABLE V.

		Entrants.	Intermediates.	Leavers.
<i>Clothing</i> :—				
Girls	...	+ 7.7	- 0.5	+ 4.3
Boys	...	+ 8.5	+ 3.2	+ 7.4
<i>Footgear</i> :—				
Girls	...	+ 4.5	+ 3.5	- 0.3
Boys	...	+ 3.2	+ 1.1	+ 0.9

Except in two small instances, there has been an improvement all round. The high percentage satisfactory in the Entrant group is a notable and pleasing feature of the returns. Industrial depression was not so acute in 1923 as in the previous year, and the better figures are probably due to this.

The personal equation in assessing what is satisfactory or unsatisfactory makes comparison with other towns unreliable, but this error does not come in when comparing Dewsbury's figures as between last year and this year as the inspections were carried out by the same observer. The improvement is, undoubtedly, real, whether it is lasting depends upon industrial circumstances.

For the four war years, an average computation gives the percentages satisfactory as follows:—

				Clothing.	Footgear.
Boys	...	...	...	97.25	96.7
Girls	...	...	...	98.40	97.1

From the figures in Table IV., the corresponding percentages for 1923 are:—

Boys	...	...	...	96.4	94.9
Girls	...	...	...	93.7	95.9

so that it seems as if the economic conditions—as reflected by the clothing of school children—are not so satisfactory now as during the war. The false prosperity of those years is reflected in the comparative penury of the years after.

On the other hand, the small difference which appears to exist in the percentages afforded by varying periods of economic conditions, lends weight to the view that certain families, year after year, contribute largely towards the upkeep of unsatisfactory conditions of cleanliness, habiliments and nutrition found during routine inspections.

#### NUTRITION.

TABLE VI.

	Entrants.		Intermediates.		Leavers.		Total.
	Boys	Girls.	Boys.	Girls	Boys.	Girls.	
Normal ... ..	280	274	458	398	643	655	2708
Below Normal ...	26	37	43	62	63	75	306
Percentage Normal	91.5	88.1	91.4	86.5	91.1	89.7	89.8
„ „ 1922	96.7	90.9	85.1	85.9	82.7	83.7	87.7

The Entrant group in 1923 does not give as good a percentage as in 1922. In this group are children born in 1918; perhaps the acute industrial depression following the war years may explain these unfavourable figures.

The progressive deterioration noticed last year, as the ages increased, is not present this year.



It is interesting to compare the Intermediate group children with the Entrant group for the years 1913, 1914 and 1915. The Nutritional Mean for Entrants in these year was, for boys, 96.3%, and for girls, 96.7%. From these figures it appears that in the same group of children there has been some slight deterioration in nutrition during the school period from 5 to 8 years. Comparisons for later periods cannot, at present, be made. In endeavouring to assess the cause for this deterioration, the issue is complicated by many factors whose influence is difficult to measure; also the total figures available are small in a town like Dewsbury, and therein arise possibilities of errors.

## NUTRITION.

TABLE VII.

Percentage of children below normal. A comparison of the findings in the various schools.

School.	Boys.	Girls.	Total Avge.	Av. 1922	Mean Av. 3 yrs. 1921-23.
Batley Carr C. ...	10.5	2.8	6.8	17.6	11.0
Boothroyd Lane C. ...	7.5	6.4	7.0	11.8	8.4
Carlton Road C. ...	14.7	12.8	13.8	13.2	9.9
Chickenley Lane C. ...	13.5	9.3	11.7	7.3	7.4
Dewsbury Moor C. ...	9.2	7.0	8.1	12.8	9.2
Dewsbury Parish C. of E.	9.1	—	9.1	4.7	10.1
Earlsheaton C. of E.	7.8	6.6	7.2	7.8	8.4
Earlsheaton C. ...	3.9	23.4	13.2	7.5	9.4
Eastborough C. ...	5.8	11.1	8.7	11.5	8.9
Ravensthorpe C. of E.	4.2	14.1	9.6	12.6	8.1
Savile Town C. of E.	7.6	18.8	14.1	7.7	8.8
Shaw Cross C. ...	8.3	23.3	19.2	11.2	11.2
St. John's C. of E. ...	11.1	7.4	9.0	10.3	14.4
St. Joseph's R.C. ...	14.4	18.9	16.6	24.1	14.7
St. Paulinus' R.C. ...	7.7	11.2	9.4	18.8	10.6
Thornhill C. of E. ...	8.3	15.7	11.3	13.9	10.4
Thornhill Edge C. of E.	—	13.7	10.7	7.8	7.5
Thornhill Lees C. of E.	4.5	10.3	7.0	14.9	8.8
Thornhill Lees Moor C. of E.	6.6	9.5	9.1	18.9	10.7
Victoria C. ...	16.4	15.	15.7	13.0	10.7
Walker C. ...	—	—	—	23.3	15.2
West Town C. of E.	10.9	6.1	8.6	4.8	9.1
Whitley Lower C. of E.	20.0	13.6	17.0	13.3	11.5

The column showing the average for three years is naturally a more accurate index of the physical development of the children attending any one school than the figures for one year only. In order that a true perspective be obtained, it will be necessary to analyse the figures over a period of ten years, *i.e.*, the school lifetime of a child. This cannot at present be done, as the comparative figures for the various schools were only begun in 1921. The tendency of certain schools to stand out from others is noticeable for the three year period, but any deductions to be drawn therefrom, would be fundamentally unsound with the data available.

A special enquiry into Physical Fitness was begun during the year, and the information thereby elicited is given later in the Report.

#### HEART AND CIRCULATORY SYSTEM.

TABLE VIII.

	Entrants.		Intermediates.		Leavers		Tot.
	M.	F.	M.	F.	M.	F.	
Organic Disease ...	1	...	4	1	4	7	17
Functional Disease ...	5	8	3	10	2	9	37
Anaemia ...	11	14	7	10	14	22	78
	17	22	14	21	20	38	132

The number of circulatory defects found was higher than in 1922, but a larger number of children were examined. The percentages of heart and circulatory defects for 1922 was 2.8% Entrants; 4.4% Intermediates; and 4.8% Leavers.

For 1923, the figures are :—

Entrants	...	...	...	6.1
Intermediates	...	...	...	3.4
Leavers	...	...	...	4.0

A survey of the comparatively few figures available shows that anaemia is the cause of the unfavourable position of the Entrant group.

It is also worth noting that Organic Heart Disease increases as age increases in both sexes, and that anaemia is a distinct cause of disability in girls of leaving age.

Heart Disease is found to be one of the chief causes of death in the general population, and a perusal of the Registrar General's statistics over a period of years shows a definite and serious advance in the number of deaths from Diseases of the Circulatory System. The foundation for some of these deaths has been laid during school days. Enough attention is often not taken of "growing pains" which are passed over as an inevitable consequence of childhood. There is no such phenomenon as "growing pains." It does not cause pain to grown in a normal child. Practically always, such pains are signs of a rheumatic diathesis, and should always be regarded as warnings of a potentially dangerous condition. Rheumatic Fever, and its nervous manifestation, Chorea, are the commonest causes of Organic Heart Disease.

Greater attention has been directed towards the welfare of these children in late years. It is found that the open air school is as beneficial for this type of child as it is for the frankly



Tubercular. Many children now on the border line between health and illness would be definitely saved if it were possible for them to attend an open air school, receiving plain, wholesome meals therein; for a period of 6 to 12 months.

#### CHEST COMPLAINTS (OTHER THAN TUBERCULOSIS.)

TABLE IX.

Class.		Boys.	Girls.	Percentages.		Total
				Boys.	Girls.	Perctge.
Entrants	...	61	47	19.9	15.1	17.5
Intermediates	...	56	36	11.1	7.8	9.5
Leavers	...	66	50	9.3	6.8	8.0
<hr/>						
Totals	...	183	133	13.4	9.9	11.6

The Entrants group again gives the worst figures, and is very similar to the findings last year. The other two groups show an improvement upon last year's figures. The time of examination of the Entrants—the Winter Session—has, I believe, something to do with the high rate. Colds are very prevalent at this time. In reading the above figures, it must be remembered that they apply only to children well enough to attend school. Serious cases of Respiratory Troubles are, therefore, not included.

The death rate from Bronchitis in this town is high, particularly in the young and the old. Atmospheric dirtiness is indubitably a large factor in the causation of Respiratory Troubles.

During 1923, four children of school age died from Non Tubercular Respiratory Diseases.

#### TUBERCULOSIS.

The diagnosis of Pulmonary Tuberculosis in ordinary routine inspections is impossible. The procedure is to refer doubtful cases for further examination at the School Clinic. If they are still considered to be possible cases they are referred to the Tuberculosis Clinic, where, if found positive, they automatically come under treatment. If negative, they are referred back to the School Clinic for a further period of observation. If treatment in some form or another is thought desirable, they are referred to their private medical attendant. No medicinal treatment is undertaken at the School Clinic.

Seventy-seven children were referred for examination at the Tuberculosis Dispensary. The appended Table gives the findings in these cases.

TABLE X.

	Boys.	Girls.	Total.
Positive ... ..	9	15	24
Pre-Tubercular ... ..	7	10	17
Negative ... ..	17	15	32
Bone or Joint Tubercle	1	—	1
Glands or Skin Tubercle	2	1	3
Total ... ..	36	41	77

Four boys and four girls were discharged from Whitley Sanatorium. Two of the boys had had Pulmonary Tuberculosis ; one abdominal, and one hip disease. All four were cured, and are now either at work or attending school.

Three girls were suffering from Pulmonary Tuberculosis. Two have returned to School, whilst one is still too ill to attend. One girl suffered from Spinal Disease. She is now over school age.

One girl and one boy suffering from Pulmonary Tuberculosis, and one boy with Hip Disease, were admitted to Whitley Sanatorium.

#### RESULTS OF DISPENSARY TREATMENT.

The total number of children of school age who attended the Tuberculosis Clinic was 163 ; of these, 77 were new cases, and 86 cases carried forward from 1922.

Seventy-four children were still under treatment at the end of the year. Forty-six children were discharged, and are now only on observation. The majority of these have kept quite well.

One child of school age died from Pulmonary Tuberculosis.

NOSE AND THROAT: TABLE XI.

	Entrants.		Intermediates.		Leavers.		Total.
<i>Nose and Throat</i> :—	M.	F.	M.	F.	M.	F.	
Cleft Palate ...	1	—	2	—	—	2	5
Deflected Septum ...	—	1	—	—	—	—	1
Rhinitis ... ..	—	—	3	—	1	1	5
<i>Tonsils</i> Totals	7	15	9	6	29	30	96
Slight enlargement ...	7	14	6	5	20	28	80
Much enlargement ...	—	1	3	1	9	2	16
<i>Adenoids</i> Totals	14	8	5	14	12	14	67
Present alone ...	2	1	—	3	—	—	6
Mouth Breathers ...	7	3	5	10	12	12	49
Tonsils & Adenoids...	5	4	—	1	—	2	12
(Enlarged but not Mouth Breathers).							
<i>Glands, Cervical</i> , Totals	31	34	75	48	75	50	313
Palpable ... ..	25	30	65	46	71	46	286
Enlarged ... ..	3	4	10	2	4	4	27
	53	58	94	68	117	97	487

The figures of abnormalities of the Nose and Throat are smaller than in 1922. Worked out as percentages, it is found that the groups show the following results:—

TABLE XII.

	Entrants.	Inter-mediates.	Leavers.	Three Groups.
Abnormalities of the				
Tonsils ... ..	3.5%	1.5%	4.1%	3.1%
Adenoids... ..	3.5%	1.9%	1.8%	2.2%
Enlarged Glands ...	10.5%	12.8%	8.7%	10.4%
Total Abnormalities ...	17.5%	16.2%	14.6%	16.1%

Comparing the percentage of Nose and Throat defects found in routine examination with 1922.

TABLE XIII.

	1923.		1922.	
	Boys.	Girls.	Boys.	Girls.
Entrants ... ..	17.3	18.7	22.4	19.8
Intermediates ... ..	18.7	14.8	23.2	22.2
Leavers ... ..	16.6	13.3	21.6	20.0

The good effects of School Medical Inspection are exemplified in the diminishing numbers of defects found, particularly in the later years.

#### DULL AND BACKWARD CHILDREN.

TABLE XIV.

Group.	Male.	Female.	Total	Percent'ges
Entrants ... ..	2	—	2	0.32
Intermediates ... ..	6	3	9	0.94
Leavers ... ..	7	15	22	1.53
Total ... ..	15	18	33	0.93

The number naturally increases as age advances. Backwardness in academic achievements does not necessarily signify a similar state in earning a livelihood. The Mental Tests, unfortunately, are unable to gauge this attribute with any degree of accuracy. The only test is that of actual experience, and the results of this are not attainable under the present organisation of the School Medical Service.

## SKIN DISEASES.

TABLE XV.

		Entrants.		Intermediates.		Leavers.		Total.	
		M.	F.	M.	F.	M.	F.	M.	F.
Ringworm—									
Scalp	...	1	2	1	2	—	1	2	5
Impetigo	...	1	—	1	1	—	1	2	2
Scabies	...	2	—	2	—	1	1	5	1
Eczema	...	1	1	1	4	1	4	3	9
Other Skin Diseases	...	2	1	1	1	1	10	4	12
		7	4	6	8	3	17	16	29

The percentages obtained from the above figures are:—

TABLE XVI.

		Boys.	Girls.	Total.
Entrants	...	2.3	1.3	1.8
Intermediates	...	1.1	1.7	1.4
Leavers	...	0.42	2.3	1.36
		1.27	1.8	1.5

It must be understood that the above figures apply only to certain groups of children examined on certain days. They give no true idea of the actual amount of skin trouble amongst scholars.

A more accurate picture is drawn by TABLE XXVIII. under the heading of School Clinic Work.

## EYE TROUBLES.

TABLE XVII.

*External Eye Disease. Percentages:—*

		Entrants.		Intermediates.		Leavers.		Total.
<i>Complaint.</i>		M.	F.	M.	F.	M.	F.	
Squint	...	1.6	2.25	2.4	2.4	2.4	1.6	2.1
Blepharitis	...	1	1	1.4	0.9	0.14	0.5	0.73
Conjunctivitis	...	—	—	—	0.2	0.3	—	0.09
Corneal opacity	...	—	0.32	—	—	—	0.4	0.13
Other Defects	...	1	—	0.2	0.2	0.45	0.27	0.33
		3.6	3.57	4.0	3.7	3.29	2.77	3.4
		3.5%		3.8%		3%		

Forty children (*i.e.*, 1.3%) suffering from squint were wearing glasses. This means that 62.5% of the squinting children found in routine inspection were already wearing glasses. This is gratifying as showing a degree of parental responsibility which, though capable of improvement, is, on the whole, encouraging.

Squint is the commonest external eye complaint found in routine medical inspections. This is the usual finding. The percentage for Dewsbury is slightly above the average for England and Wales, but comparing 1923 with 1922 as regards Dewsbury alone, the findings are an improvement upon 1922.

Squint has an important bearing upon the well-being of the school child other than the aesthetic; though it is usually this factor that induces parents to have treatment undertaken. Unfortunately, in a proportion of cases, squint causes serious damage to the squinting eye.

The causative factors leading to the onset of squint seem to be capable of division into (a) Idiopathic; (b) Injury; (c) Infectious Disease. In the first group the squint comes on early in life, before school age is reached. If uncorrected shortly after being observed, it is found, on testing the eye when the child enters school, that there is a large refractive error, and glasses, although improving the sight, do not help towards correction of the deformity. I have noticed a number of cases commencing from 6 months to 18 months, attending the Child Welfare Clinics, for which the parents can assign no cause.

In a few cases, injury to one or both eyes has brought on a squint. This squint does not appear to be capable of much improvement by spectacles.

Amongst the infectious diseases, Measles is the one most frequently assigned as the cause, but Whooping Cough is also given as a cause by parents. Diphtheria is not often mentioned. Influenza is also blamed by parents in a certain number of cases, a number which is, apparently, increasing.

The earlier the squint is treated the more likely is the deformity to be corrected. I believe that glasses should be prescribed as soon as the squint is ascertained. If for any reason impracticable the fixing eye should be kept completely covered, whilst the child should be kept under constant medical attention.

It is hoped, in 1924, to carry out an investigation into the causation of squint, as far as the resources available in a comparative small school population will allow.



## VISION.

TABLE XVIII.

VISION :	INTERMEDIATES.				LEAVERS.				TOTAL.	
	Male.		Female.		Male.		Female.		M.	F.
	No.	%	No.	%	No.	%	No.	%	%	%
Defective 6/9ths ...	62	12·3	61	13·2	100	14·1	97	13·2	13·4	13·2
„ more than 6/9ths	76	15·1	68	14·7	112	15·8	160	21·9	15·5	19·1
Normal ...	363	72·6	331	72·1	494	70·1	473	69·9	70·1	67·7

In the Intermediate group, therefore, 27.4% of the boys and 27.9% of the girls shows some defect of vision. In the Leaver group, the boys with defective sight constituted 29.9%, and the girls 35.1%.

From the above findings, it appears that eyesight deteriorates as school age advances, and that this deterioration is greater in girls than in boys.

All the schools are not as well lighted as could be wished, owing either to the intervention of surrounding buildings or to erroneous ideas in the placing of windows. Some of the older schools exhibit an unnecessary elaboration in window designs, which, whilst perhaps of architectural merit, do not help forward the all important aim of obtaining a good light in the most advantageous position for the children at their desks. In smoky industrial towns, too much window space can hardly be provided, but if provided in the wrong place, abundance of light may be as injurious as a deficiency. The ideal is for the strongest light to pass over a child's left shoulder obliquely from back to front ; a weaker light may also be utilized on the right side and above. It is bad to have children sitting facing a strong light on the one hand, or with their backs to the light on the other. In some of the schools, it is practically impossible to arrange the desks in a satisfactory manner owing to the mistaken position of the windows.

Relating to the above Table, it was found that 21 children with normal vision were wearing glasses to obtain that result. In 10, vision with glasses was 6/12 or higher. In 25 cases who were wearing glasses, the vision was below 6/12. Ten of this group also suffered from squint.

The various schools have been compared as in 1922. It was pointed out then that the schools could not be judged on one year alone, and the warning should be again applied to the figures below.



## DEFECTIVE VISION FOUND IN THE VARIOUS SCHOOLS.

TABLE XIX.

School.	Boys.	Girls.	Total Avge.	Av. 1922.	Mean Av. 3 yrs. 1921-23.
Batley Carr C. ...	21.6	26.4	23.8	29.6	24.5
Boothroyd Lane C. ...	17.1	32.0	24.6	31.1	27.1
Carlton Road C. ...	22.6	24.0	23.2	32.5	26.0
Chickenley Lane C. ...	26.9	36.3	30.5	22.8	24.5
Dewsbury Moor C. ...	28.5	30.0	29.2	55.3	33.1
Dewsbury Parish C. of E. ...	33.3	—	33.3	38.0	36.2
Earlsheaton C. of E. ...	30.5	34.2	32.3	28.8	25.1
Earlsheaton C. ...	33.3	28.2	30.2	13.6	20.7
Eastborough C. ...	20.1	20.6	20.4	29.1	24.2
Ravensthorpe C. of E. ...	18.7	24.5	21.8	27.7	23.0
Savile Town C. of E. ...	43.7	52.5	48.6*	42.5	30.8
Shaw Cross C. ...	50.0	32.0	34.4	42.3	35.4
St. John's C. of E. ...	29.7	45.2	37.9	26.1	24.6
St. Joseph's R.C. ...	37.9	51.1	44.6	46.9	44.7
St. Paulinus R.C. ...	27.7	28.3	28.0	48.4	30.8
Thornhill C. of E. ...	38.9	27.2	34.4	31.1	32.7
Thornhill Edge C. of E. ...	—	30.0	30.0	57.1	36.7
Thornhill Lees C. of E. ...	27.4	32.8	29.7	35.4	29.1
Thornhill Lees Moor C. of E. ...	—	23.3	23.3	38.2	26.0
Victoria C. ...	26.3	35.2	31.2	48.8	35.1
Walker C. ...	20.0	44.4	24.0	23.5	24.9
West Town C. of E. ...	46.6	34.2	40.9	48.8	39.8
Whitley Lower C. of E. ...	30.0	30.0	30.0	20.5	22.0

The above percentages<sup>a</sup> include all cases showing any defect of vision.

The examination in the Savile Town C. of E. school takes place in the Parochial Hall, which is not efficiently lighted, hence the very poor results.

The detection and correction of errors of refraction is an important aspect of school medical activity. All cases showing defect of vision at routine inspections are asked to attend the School Clinic for a further examination. In about 5% it is found that examination under more favourable conditions dispels the apparent defect.

Girls show a slightly higher incidence than boys, this being more pronounced as age advances. Sewing, knitting, etc., under adverse condition of lighting in the homes is possibly the cause of this.

Defects of vision are, apparently, judging from reports of School Medical Officers received from various towns and districts, more numerous in urban than in rural areas; and more numerous in industrial than in country towns. Atmospheric impurity, causing diminished natural light and increased artificial light, must play an important part. Poor general health produced by unhygienic surroundings, lack of fresh air and proper nourishment, have also been found to be not unimportant.

Small errors of refraction not infrequently right themselves when the general condition of the child improves. I believe that open-air schools would prevent many children wearing spectacles, and would enable some of those now wearing them to discard them after a few months of the open-air regime.

DEFECTIVE HEARING.—PERCENTAGE DEFECTIVE.

TABLE XX.				
	Entrants.	Inter-mediates.	Leavers.	No. of Children Examined.
Boys ...	1.0	1.2	0.8	1513
Girls ...	1.3	1.9	1.5	1501
	<hr/> 1.1%	<hr/> 1.5%	<hr/> 1.1%	<hr/> 3014

These results are very similar to those of last year. The commonest cause of deafness in children is discharge from the ears, caused usually by inflammation of the middle ear. Adenoids are another frequent cause, though removal of adenoids does not always lead to remedy of the defect. The faulty method of breathing present in children suffering from adenoids seems to be as much to blame as the growths themselves. Unfortunately, the adenoids may be skilfully removed, but instruction directed towards restoring proper breathing is omitted, hence the poor ultimate result, and the undeserved reproach cast upon the operation.

As last year, I would desire to repeat the warning against syringing ears which are discharging. Practically all ear, nose and throat specialists are against this method of treatment. In unskilful hands, grave damage to the delicate hearing mechanism may result.

SPEECH DEFECTS.—TABLE XXI.

	Entrants.	Inter-mediates.	Leavers.	No. of Children Examined.
Boys ...	1.6	0.6	0.85	1513
Girls ...	3.2	0.9	0.55	1501
	<hr/> 2.4	<hr/> 0.75	<hr/> 0.70	<hr/> 3014

Taking all the children examined in routine inspections, a total of 1.28% showed speech defects. As might be expected, the entrant group contributes largely; the Intermediate and Leaver groups do not differ much. Temporary defects, which become remedied by attendance at school account for the comparatively large Entrant percentages. In the other groups, the percentage is an indication of permanent defects which persist in spite of educational amenities.

A special investigation has been commenced during 1923 into the prevalent defects of speech found, a fuller account of which is presented later in the Report.

## NERVOUS DISEASES.

Very few cases were brought to light in routine inspection. There were none in the Entrant group. One boy suffered from Chorea in the Intermediate group. Two boys had Chorea in the Leaver group, and one boy had Epilepsy in the same group. None of these defects were found in girls of any group.

## TEETH.

TABLE XXII.

	ENTRANTS.				INTERMEDIATES.				LEAVERS.				Pct.
	Male. No.	%	Female. No.	%	Male. No.	%	Female. No.	%	Male. No.	%	Female. No.	%	
Perfect Set of Teeth ...	43	14.0	28	9.0	22	4.3	37	8.0	142	20.1	186	25.4	15.1
One to Four Decayed	143	46.7	172	55.3	353	70.4	301	65.4	478	67.7	469	64.2	63.5
More than Four Decayed	120	39.3	111	35.7	126	25.3	122	26.6	86	12.2	75	10.4	21.4
	306	—	311	—	501	—	460	—	706	—	730	—	—

In a total of 3,014 school children examined of ages between 5 years and 12 years, only 15.1% had a perfect set of teeth. 84.9% had one or more decayed, *i.e.*, 84 children in every 100 examined were in need of Dental Treatment. In 21.4% the need was urgent.

The discrepancy which apparently exists in the above figures between a perfect set of teeth in the Intermediate and Leaver groups is due to the same factors as were pointed out in last year's report, *viz.*: (1) A number of temporary teeth are allowed to become decayed in the Intermediate group, and, being only temporary teeth, are not filled. (2) Fillings are counted as perfect teeth in the Leaver groups.

The figures for 1923 are very similar to those for 1922. In the latter year, out of 2,504 children examined, 17.1% had a perfect set; 60.2% had one to four teeth decayed; and 22.7% had more than four decayed.

There has been a tendency in modern times to foster upon carious or septic teeth most of the evils flesh is heir to. Without going to such extremes, the presence of septic foci in the mouth cannot be ignored as a potential cause of ill-health. Decayed teeth are usually painful teeth. In consequence, their proper function of masticating food is improperly performed owing to the pain resulting therefrom. The food thus passes into the stomach imperfectly broken up, and throws increased work upon the digestive organs. Again, the majority of carious teeth are septic. The discharge from these septic teeth makes the breath offensive; it also passes down into the stomach, and tends to cause irritability and inflammation of that organ. The

poisons present in the discharge become absorbed into the blood, leading to anaemia and ill health. In these ways, firstly mechanically, and secondly chemically, do decayed teeth damage the health.

With the staff at present available, it is impossible to carry out remedial measures effectively. The school dentist, dealing with a population of over 8,000, of whom, approximately, 80 per cent require dental attention, is quite unable to cope with the situation by means of only three sessions of two hours each per week. There is work in the Borough for a full-time dentist, and when the economic situation permits, this is one of the first items that should be considered.

The School Dentist has concentrated, as far as possible, in treating children from 7 to 11 years of age. The Dental Defects detailed in the Table above have been discovered by the Assistant School Medical Officer at routine inspections. Only a fraction of these defects can hope to be remedied at the School Clinic under present arrangements.

#### DEFORMITIES.

TABLE XXIII.

Defect.	Entrants.		Int'mediate		Leavers.		Totals.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	No.	%
Bow Legs ...	9	6	7	1	13	6	42	1.4
Pigeon Chests ...	1	1	3	3	12	3	23	0.76
Knock-Knee ...	2	6	3	5	2	2	20	0.66
Cleft Palate ...	1	—	2	—	—	2	5	0.16
Hernias ...	1	1	1	—	—	1	4	0.13
Other Deformities ...	4	1	9	3	11	6	36	1.2
	18	15	25	12	38	20	128	4.3

The above Table gives the full number of defects found in routine inspection. If a child presented more than one defect, the several defects are taken under their respective headings. The percentages are, therefore, the measure of the defects present in the school children examined in routine inspection.

A complete record has now been obtained of 112 cases of crippled children of school age in the Borough. The investigation has been carried out on the lines laid down in the Medical Research Council's Study of Social and Economic Factors in the Causation of Rickets (No. 20).



TABLE XXIV.

The following Table gives the causes of the deformity.

	Boys.			Girls.			Total.
	Upper Limbs.	Lower Limbs.	Spine, etc.	Upper Limbs.	Lower Limbs.	Spine, etc.	
Rickets ... ..	—	28	2	1	34	1	66
Infantile Paralysis ...	1	9	—	2	9	—	21
Tuberculosis ... ..	—	3	1	1	1	—	6
Congenital Causes ...	4	4	—	1	2	—	11
Accidental ... ..	1	—	—	1	—	—	2
Hemiplegia and other States ... ..	5			1			6
	11	44	3	7	46	1	112

A fuller investigation into the sixty-six cases of Rickets reveals some interesting facts.

In 57 of these cases, certain family particulars were obtainable, as follows:—42 of the fathers and 37 of the mothers were born and bred in towns; 12 fathers and 16 mothers were country bred, but had migrated into the town. The health of the fathers had always been good in 41 cases, and fair in 11. In the mothers, it had been good in 38 cases, and fair in 12. In five there was a history of chronic ill-health. In 29 instances the fathers were in regular employment.

The home conditions were also enquired into with the following results:—

#### SURROUNDINGS:—

*Good*, 4; *Fair*, 31; *Bad*, 26; *Not Ascertained*, 5.

The average number of rooms per house was three. The average number of occupants per house 6.9, giving the room space available per person as 0.42. The average for the whole of Dewsbury was 0.88. That is, the overcrowding in families showing cases of Rickets was twice that of the whole population of the town. Dewsbury shows, as a whole, the least room space available per person of any County Borough in Yorkshire.

Nineteen houses had through ventilation, 42 were back-to-back, giving a proportion of 68.8% of back-to-back. The proportion for the whole Borough is 35% of back-to-back.

Eight houses had privies, the rest were on the W.C. system, but commonly a house, shared with one or more other houses, one W.C.

In 16 houses the general cleanliness was very good. In 32 it was fair, and in the remainder (13), conditions were unsatisfactory.

Ventilation was excellent in 9 houses, moderate in 41 and poor in 11.

In 15 families, the total family income was less than 30/- per week. The average rental was, approximately, 5/3 per week, excluding rates. The limit of variations were from 3/1 up to 9/6 per week, excluding rates.

#### INFECTIOUS DISEASES IN SCHOOLS.

Scarlet Fever has again been fairly prevalent, though less so than in 1922. A total of 106 cases occurred in school children. The incidence has been universal, with small localised accentuations in Ravensthorpe and Savile Town.

The disease has been mild in type. One death from this cause occurred in children of school age.

Diphtheria has been less prevalent. Only 13 cases being notified, as compared with 20 in 1922 and 37 in 1921. The rigorous swabbing of all children with suspected sore noses or ear discharges has been of proved value. Cases which might have caused trouble having been brought to light early, and suitably dealt with. In all cases, contacts of cases have been swabbed.

Measles has been prevalent. As this complaint is not notifiable, it is impossible to give a true estimate of the number of cases. The teachers of various schools notified to the School Medical Officer 289 cases, but this figure does not afford any indication of the prevalence, as some teachers do not notify the occurrence of infectious diseases in their schools. Table XXVI. gives a more accurate picture.

One child died from Measles.

Mumps was very prevalent in the last quarter of the year. The Infants' department of Lees Moor having to be closed for three weeks on this account.

Chicken Pox was also scattered throughout the schools in the Borough. The greatest number of cases apparently occurring in the Dewsbury Moor and Lees Moor areas. This complaint is not notifiable, so that figures are only approximate.



NOTIFIABLE INFECTIOUS DISEASES OCCURRING IN THE  
ELEMENTARY SCHOOLS IN THE BOROUGH

TABLE XXV.

School.	Scarlet Fever.			Diphtheria.			Tot.	%	
	B.	G.	%	B.	G.	%			
Batley Carr C. ...	...	4	1	1.4	—	2	0.57	7	1.97
Boothroyd Lane C. ...	...	1	3	0.6	—	1	0.15	5	0.75
Carlton Road C. ...	...	1	3	0.74	—	1	0.18	5	0.92
Chickenley Lane C. ...	...	2	—	0.8	—	—	—	2	0.8
Dewsbury Moor C. ...	...	1	5	2.8	—	1	0.35	7	3.15
Dewsbury Parish C. of E.	...	1	—	1.5	—	—	—	1	1.5
Earlsheaton C. of E. ...	...	3	4	3.2	—	—	—	7	3.2
Earlsheaton C. ...	...	1	2	1.2	—	—	—	3	1.2
Eastborough C. ...	...	—	3	0.5	—	1	0.16	4	0.66
Ravensthorpe C. of E. ...	...	11	12	2.7	—	—	—	23	2.7
Savile Town C. of E. ...	...	3	7	4.1	4	—	—	14	4.1
St. John's C. of E. ...	...	1	1	1.0	—	1	0.51	3	1.51
St. Joseph's R.C. ...	...	—	2	1.1	—	—	—	2	1.11
St. Paulinus' R.C. ...	...	2	3	1.2	—	—	—	5	1.2
Thornhill C. of E. ...	...	—	1	0.3	1	1	0.62	3	0.92
Thornhill Edge C. of E.	...	1	4	6.7	—	—	—	5	6.7
Thornhill Lees C. of E.	...	2	2	1.0	—	—	—	4	1.0
Thornhill Lees Moor C. of E.	...	3	2	2.4	—	—	—	5	2.4
Victoria C....	...	1	1	0.5	—	—	—	2	0.5
Walker Council ...	...	4	2	6.5	—	—	—	6	6.5
West Town C. of E. ...	...	3	3	2.3	—	—	—	6	2.3
Whitley Lower C. of E.	...	—	—	—	—	—	—	—	0.0
<hr/>									
	45	61	1.8	5	8	0.11	119	1.91	

The percentages are calculated upon average number of children attending the schools.

When the schools are compared relatively to numbers, it is seen that the incidence of Scarlet Fever was greatest in Thornhill Edge and Thornhill Walker Schools. Ravensthorpe, though having the greatest actual number of cases, is a large school, and, consequently, the percentage incidence was not high.

The incidence rate of notifiable infectious disease among the school population was 1.9. The incidence rate in the general population (including children) was, for Scarlet Fever, 3.41; Diphtheria, 0.41, *i.e.*, 1.9 for both complaints.

## INFECTIOUS DISEASES NOTIFIED BY TEACHERS DURING 1923.

TABLE XXVI.

School.	Measles.	Whooping Cough.	Chicken Pox.	Mumps	Scarlet Fever.	Diphtheria.	Influenza.	Total.
Batley Carr C. ...	62	29	1	1	5	2	—	100
Boothroyd Lane C. ...	97	1	4	4	3	1	4	114
Carlton Road C. ...	51	10	8	1	3	—	1	74
Chickenley Lane C. ...	53	1	1	—	2	—	—	57
Dewsbury Moor C. ...	26	3	4	12	2	1	—	48
Dewsbury Parish C. of E. ...	—	—	—	—	—	—	—	—
Earlsheaton C. of E. ...	33	1	5	—	8	—	—	47
Earlsheaton C. ...	44	2	2	—	3	—	—	51
Eastborough C. ...	23	18	11	3	5	1	2	63
Ravensthorpe C. of E. ...	35	1	2	1	22	—	—	61
St. John's C. of E. ...	21	—	1	72	2	1	1	98
St. Joseph's R.C. ...	—	4	—	—	—	—	—	4
St. Paulinus' R.C. ...	80	5	10	6	4	—	—	105
Shaw Cross C. ...	33	—	—	12	—	—	—	45
Savile Town C. of E. ...	49	2	—	2	10	4	—	67
Thornhill C. of E. ...	—	2	—	4	1	1	1	9
Thornhill Edge C. of E. ...	—	2	2	40	7	—	1	52
Thornhill Lees C. of E. ...	48	21	21	9	9	—	3	111
Thornhill Lees Moor C. of E. ...	2	14	—	65	3	—	—	84
Victoria C. ....	41	1	11	1	3	—	—	57
Walker C. ...	—	—	—	38	8	—	—	46
West Town C. of E....	12	—	—	7	—	—	—	19
Whitley Lower C. of E. ...	4	1	—	—	—	—	—	5
	714	118	83	278	100	11	13	1317

The above notifications were much more complete than in former years, and were made upon the weekly return forms which most of the Head Teachers send in of children absent from school. This system was initiated last year, and has proved of very great use in keeping touch with children who were ill from one cause or another.

TABLE XXVII.

## THE WORK OF THE SCHOOL CLINIC.

<i>Summary of Clinic Work.</i>			Inspections.	Re-Inspec- tions.	Totals.
Visits to Dental Department	...	...	207	545	752
Anaesthetics	...	...	—	576	576
Visits to Ophthalmic Department	...	...	349	163	512
„ Minor Ailments	...	...	1502	9758	11260
„ Special Inspections	...	...	455	475	930
„ Remedial Exercises	...	...	—	129	129
„ Throat and Ear Department	...	...	79	84	163
„ Outbathing	...	...	11	70	81
			2603	11800	14403

As compared with 1922, there were 185 more primary inspections, 758 more re-inspections, giving a total of 943 more visits. When it is remembered that only 2,261 visits in all were paid to the School Clinic in 1920, it will be realised how greatly the work has expanded, and is positive proof of the popularity of the Clinic.

A total of 1,379 individual children were treated in the Minor Ailment Clinic.

A system of payments for services rendered was put into operation, at the request of the Board of Education, towards the end of the year. The following scale was adopted provisionally :—

*Minor Ailments*—First 14 days attendance, free  
Thereafter 3d. per attendance.

*Dental Clinic*.—Extractions and Fillings, 3d. per tooth, with a maximum of 2/- at one sitting. Scalings, 6d. per attendance. Anaesthetics (gas) 6d. per sitting. Inspections and Advice, free.

*Income Scale*.—Treatment Free.—Family income per head, after deducting rent and rates, up to an income of 15/- per head for a family not exceeding four persons, and 12/6 per head for a family exceeding four persons.

Incomes above the same, the parents to be charged according to the approved scale of charges, or referred to their own Medical Practitioner.

#### THE MINOR AILMENTS CLINIC.

TABLE XXVIII.

Complaint	1923			1922		
	Cases	Attend- ances	Average number of attendances per case	Cases	Average number of attendances per case	
Ringworm—Scalp...	69	1151	16.6	89	14.4	
Body...	51	546	10.7	39	8.2	
Scabies ... ..	20	111	5.5	24	8.2	
Impetigo ... ..	219	1512	6.9	279	7.5	
Eczema ... ..	147	1200	8.1	128	5.9	
Other Skin Diseases	213	1121	5.4	109	8.3	
Minor Injuries ...	174	1040	5.9	115	6.8	
Verminous Head ...	319	584	1.8	159	2.4	
Verminous Body ...	5	24	4.8	48	3.0	
Otorrhoea ... ..	78	1718	22.0	42	26.5	
Other Ear Defect or Disease	18	86	4.7	23	7.5	
Blepharitis ... ..	95	1088	11.4	79	11.9	
Conjunctivitis ... ..	57	685	12.0	87	15.4	
Other External Eye Disease	22	105	4.7	25	5.5	
Miscellaneous ... ..	93	663	7.1	72	5.5	
	1580	11634	7.3	1318	9.1	

For purposes of comparison, the corresponding figures for 1922 are included in the last two columns. Ailments which are the most intractable are : Otorrhoea, Ringworm of the Scalp and Conjunctivitis. The total average number of attendances necessary has, however, fallen from 9.1 to 7.3. Impetigo has not been so troublesome, but there has been a considerable increase in the number of verminous heads and Otorrhoea.

The large increase in the former cases is somewhat disheartening, but, on the other hand, the unsatisfactory state of affairs has been more quickly remedied when once attention has been drawn to it.

The same methods of treatment have been adopted as in 1922. Towards the end of the year, negotiations were begun with Staincliffe Institution for the Treatment of Scalp Ringworm by means of X-Rays.

Consequent upon the approval of the Board of Education, it is to be hoped that certain intractable cases now on hand, will be submitted for this treatment; which is granted to be—given adequate apparatus and skill in applying it—the most successful method of treatment. All cases of Ringworm are controlled by repeated microscopical examinations. No case is considered cured until at least two consecutive specimens of hair prove free from the fungus.

There is no scheme in being for the operative treatment of Tonsils and Adenoids. A certain number of children suffering from these defects are referred to the Dewsbury and District General Infirmary.

I am indebted to Dr. Shea, resident at the Infirmary, for the following figures of operations upon ear, nose and throat carried out on children between the ages of 5 and 14 years.

For Tonsils and Adenoids removal	...	77
Mastoid Operation for Middle Ear Disease	...	4
Operations for Deflected Nasal Septum	...	3
		<hr/>
		84
		<hr/>

#### OUT-BATHING CLINIC.

TABLE XXIX.

Complaint.	Cases.			Attendances.		
	M.	F.	Tot.	M.	F.	Total.
Scabies ... ..	5	15	20	19	44	63
Verminous Condition ...	2	2	4	4	12	16
	—	—	—	—	—	—
	7	17	24	23	56	79

The girls were cured of Scabies quicker than the boys, but, on the other hand, the girls took longer to get rid of their verminous condition.

The average number of attendances for boys was 2.9 per case, and for girls 4.5.

The figures above are considerably less than for 1922.

Owing to carelessness on the part of workmen repairing the Vermin Destructor, a fire broke out in the Cleansing Room causing some damage and necessitating a cessation of work in the department over a period of nearly two months. Apart from this, however, there have been fewer cases of verminous children requiring cleansing during the year.

#### EXCLUSIONS FROM SCHOOL.

TABLE XXX.

Condition	1923.		Exclusions carried forward from 1922	Still Excluded Dec. 1923	1923 Perctge. of Total Exclusions.
	Excluded	Returned			
Ringworm—Head...	27	33	5	1	1.03
—Body...	16	20	4	—	0.96
Verminous Condition	307	316	14	5	18.53
Impetigo ...	77	76	9	10	4.63
Eczema ...	75	73	3	5	4.62
Scabies ...	15	24	10	1	0.95
Measles ...	540	604	64	—	32.61
Whooping Cough ...	89	111	29	7	5.37
Chicken Pox ...	55	115	62	2	4.44
Mumps ...	270	268	15	17	16.30
Tuberculosis ...	28	26	9	11	1.03
Bronchitis ...	34	15	—	19	1.94
External Eye Disease	24	46	25	3	1.43
Sore Throat ...	39	42	10	7	2.35
Other Causes ...	60	58	17	19	3.80
	1656	1827	266	108	100.00

The above Table gives a fairly accurate picture of the degree of illness amongst school children. The notifiable infectious diseases are excluded, as they have been dealt with earlier in the Report.

The percentages are incorporated to facilitate comparisons. The three great causes of loss of attendance in 1923 were, Measles (32.61%) ; Verminous Conditions (18.53%) ; and Mumps (16.30%). The prominence of Verminous Conditions is disquietening. Measles, as indicated in a previous section, has been prevalent all over the Borough.

There were 106 cases of Scarlet Fever and 13 cases of Diphtheria, giving an exclusion percentage of 5.99% for Scarlet Fever and 0.73% for Diphtheria.



The group of acute infectious diseases—notifiable and not notifiable—were, therefore, responsible for 65.44% of all exclusions from school on account of sickness.

#### BACTERIOLOGICAL SPECIMENS.

During the year 433 specimens were sent from the School Clinic to the Laboratory at the Town Hall. These specimens consisted of 320 samples of Hair for Ringworm, 110 specimens for the Diphtheria Bacillus, and three samples for various other examinations.

#### TREATMENT OF EYE DEFECTS.

TABLE XXXI.

	Number of Defects dealt with.				Spectacles Prescribed.		Spectacles Obtained.	
	Under the Authority's Scheme.	Submitted to Refraction by Private Practitioner or Hospital apart from the Authority's Scheme.	Otherwise.	Total.	Under Authority's Scheme.	Otherwise.	Under Authority's Scheme.	Otherwise.
Errors of refraction ... .. (including Squint)	349	32	11	392	254	39	225	39
Other Diseases or Defects of the Eyes ... ..	—	1	—	1	—	—	—	—
	349	33	11	393	254	39	225	39

The percentage of those needing glasses, who actually obtained them was 88.5%.

Under the Authority's scheme there is no obstacle, financial or otherwise, to obtaining spectacles. In cases when the parents' financial circumstances are poor, upon application to the School Medical Officer, they are enabled to pay for the spectacles in small weekly instalments, or, in extreme cases, are provided with them free.

There is, therefore, no reason why all school children needing spectacles should not obtain them. In some of the cases when glasses have not been purchased, the parents object to their children wearing spectacles; in others they do not think they are necessary, and in the residuum, no effort has been made to carry out instructions through inertia and carelessness.

The continued high numbers of children attending the Clinic for the purpose of refraction and correction of vision, shows the appreciation of the parents of the children for the facilities offered.

In 1922, 430 children were examined, of whom 291 were considered to require glasses, and in 90.3% glasses were obtained.



## REPORT OF THE SCHOOL DENTIST.

TABLE XXXII.

	Age Groups.								Specials	Total.
	7	8	9	10	11	12	13	14		
<i>No of Children dealt with :</i>										
Inspected by Dentist ...	50	79	130	143	105	40	90	29	485	1151
Referred for Treatment	41	60	101	123	93	34	78	24	448	1002
Actually Treated ...	24	31	59	70	66	...	...	...	448	698
Re-treated (periodical Examination)	...	...	...	...	...	27	53	12	...	92

As compared with last year, 55 more children were inspected ; 169 more were referred for treatment ; 358 more were actually treated.

Of those referred for treatment in 1923, 69.6% attended the Clinic for treatment. This is an improvement of 9.6% upon 1922.

PARTICULARS OF  
TIME GIVEN AND OF OPERATIONS UNDERTAKEN.

TABLE XXXIII.

No. of half days devoted to Inspect'n	No. of half days devoted to Treatment.	Total No. of Attendances made by the Children at the Clinic.	No. of Permanent Teeth.		No. of Temporary Teeth.		Total No. of Fillings	No. of Administrations of General Anæsthetics	No. of other Operations upon Permanent Teeth.
			Ex-tract'd	Filled	Ex-tract'd	Filled			
8	134	1080	269	606	1142	—	606	575	170*

\* This figure includes 31 Root Treatments and 139 Dressings.

In the treatment of school children, the School Dentist has selected a certain number of schools each year—three in 1923—and has concentrated upon them. His method has been to treat the 7 years old group and then to follow up children treated in past years under this age group. This method was commenced six years ago, hence, some of the children followed up and treated have now reached the 13 years of age group.

Only a small proportion of the dental defects present in children can, at present, be treated. Taking the condition of the teeth as a whole, it is unsatisfactory. There is a large amount of dental caries, with consequent ill-health and needless suffering. Whether it is the food that is the main cause has not been determined with certainty. An investigation I carried

out in Southampton, comprising over 300 cases of Dental Caries did not point to food as the causative factor. Undoubtedly, the small amount of Calcium Salts in the drinking water of this district plays a part. The causative agents in Rickets and in Dental Caries appear to be very similar.

Thorough cleansing of the teeth, night and morning, is not enforced by parents as it should be. Tooth Brush Drill, as employed in some areas, is a valuable aid in focussing the child's attention upon a very important item in its health education.

Preventative measures against Dental Decay rest largely in the hands of the parents. Curative measures, as supplied by the Local Education Authority, unfortunately owing to stringent economic conditions, are not sufficient to grapple with the situation at the present time. With easier times, no doubt, this deficiency will be remedied.

#### THE WORK OF THE SCHOOL NURSES.

As mentioned in a previous Report, the use of printed notices of defects found at routine inspections has been discarded, as they were found to be inefficient instruments in obtaining the necessary remedying of the defects. Reliance is placed entirely upon personal visits by nurses to the homes. This has proved in practice to be the only effective method.

TABLE XXXIV.

	*Number 1 District	Number 2 District	Total.
<i>Visits to Schools re Cleanliness :—</i>			
Visits to Schools ... ..	43	33	76
Visits to Departments ... ..	81	46	127
Number of Children Inspected ...	9281	6760	16041
Number of Children found Unclean	135	74	209
Number of Children with Skin Complaints	9	8	17
<i>Visits to Schools re Infectious Diseases :—</i>			
	No. 1.	No. 2.	Total.
Visits to Schools ... ..	46	24	70
Visits to Departments ... ..	67	64	131
Number of Children inspected re :—	2674	2217	4891
Scarlet Fever ... ..	1913	1755	3668
Diphtheria ... ..	727	197	924
Other Infectious Diseases ... ..	34	265	299
<i>Home Visiting.—Following-up :—</i>			
	No. 1.	No. 2.	Total.
For Minor Ailments ... ..	555	288	843
For Defective Vision... ..	142	103	245
For Infectious Disease ... ..	1564	1366	2930
Totals ... ..	2261	1757	4018

\* *The Schools in No. I. District are:*—Eastborough C., Carlton Road C., Batley Carr C., St. Joseph's R.C., Dewsbury Moor C., St. John's, Dewsbury Moor, Boothroyd Lane C., West Town C. of E., St. Paulinus' R.C., Victoria C. and Parish C. of E.

*The Schools in No. II. District are:*—Shaw Cross C., Chickenley Lane C., Earlsheaton C. of E., Earlsheaton C., Savile Town C. of E., Thornhill Lees C. of E., Thornhill Lees Moor C. of E., Thornhill C. of E., Thornhill Edge C. of E., Walker C., Whitley Lower C. of E. and Ravensthorpe C. of E.

In addition, the nurses paid 103 visits to schools in company with the Assistant School Medical Officer for the purpose of carrying out routine medical inspections; and seven visits with the Dentist for the same reason.

Fifty-one children were also examined in the schools on account of Minor Ailments.

The Nurses paid, in all, 256 visits to schools and 258 visits to various departments of the schools. The Doctor paid 178 visits, and the Dentist seven visits.

I have, in my past Reports, repeatedly emphasised the importance of "Following-up." Defects may be found by Routine Medical examination, but it is in the nature of wasted energy if they are not rectified by proper treatment. This purpose is fulfilled by a rigorous system of following-up all cases until the defects have been ameliorated.

#### SPECIAL INSPECTIONS.

At the request of Miss H. B. Walker, J.P., 105 children were examined as to their fitness to go for the Annual Outing under the auspices of the Dewsbury Childrens' Summer Holiday Fund.

	Boys.	Girls.	Total.
Holiday Children examined for Rhyl ...	4	16	20
Holiday Children examined for Bridlington	41	44	85
	45	60	105

The lack of an open-air school in Dewsbury is regrettable, as there are many children to whom it would be of great benefit.

The homes and surroundings of many of the children are not such as to assist healthy growth. The number of undersized men and women seen in most industrial towns—of which Dewsbury is no exception—is deplorable. Some, at least, of these people would have been stronger and more efficient citizens if they had had available, during the period of their most rapid growth, facilities for pursuing their education under open-air

conditions, coupled with expert management and good, regular meals. The aim of open-air schools is two-fold. Firstly, to build up strong, healthy adults from initially poor material, and, secondly, to educate the mind whilst, at the same time, treating the body. Elaborate structures are not necessary. The essentials are, a suitable site, open to the sun, but protected from high winds, with adequate fall to allow of drainage. Arrangements for the serving of hot meals. Arrangements for rest periods. Adequate heating in times of cold weather. Protection at all times from rain without thereby lessening the free circulation of air. Expert management of the children. The success of open-air schools depends far more upon the personality of the teachers and their experience than upon any other factor.

## SPECIAL INSPECTIONS.

TABLE XXXV.

	At School	At Clinic.	Total.
Defective Vision and Squint ...	6	512	518
Other Eye Disease... ..	—	3	3
Throat Affections ... ..	1	93	94
Nasal Defects ... ..	—	22	22
Aural Defects ... ..	1	54	55
Disease of Respiratory Organs ...	2	152	154
Disease of Circulatory System ...	1	137	138
Disease of Nervous System ...	1	58	59
Skin Complaints ... ..	6	25	31
Enlarged Cervical Glands ...	—	22	22
Dental Disease ... ..	4	—	4
Deformities ... ..	—	9	9
Accidents ... ..	—	45	45
Examinations <i>re</i> Summer Holidays	—	277	277
Examinations <i>re</i> Speech Defects ...	—	26	26
Examinations <i>re</i> Assessment of Physical Fitness ... ..	—	31	31
<i>Infectious Diseases:—</i>			
Whooping Cough and Contacts ...	—	16	16
Mumps and Contacts ... ..	—	48	48
Chicken Pox and Contacts ...	—	9	9
Measles and Contacts ... ..	—	12	12
Diphtheria and Contacts ... ..	—	12	12
Scarlet Fever and Contacts ...	4	19	23
Miscellaneous Conditions ... ..	6	109	115
	32	1691	1723



## ABNORMAL CHILDREN.

## A.—ATTENDING SCHOOL.

TABLE XXXVI.

Classification.	Boys.	Girls.	Total.
Dull ... ..	9	5	14
Backward ... ..	75	46	121
Dull and Backward... (Borderline)	5	17	22
	—	—	—
	89	68	157

Three girls who are definitely feeble-minded are attending the Elementary Schools, and one girl who is a Moral Defective.

Three girls who are Cretins—all the same family—are attending school.

No cases have been transferred to the Local Control Authority during the year.

*Epileptic Children.*

Five boys and four girls are attending the Elementary Schools, whilst one boy and two girls are too severe to be able to attend.

*Partially Blind Children.*

Two boys and five girls are attending Elementary Schools. Three boys and three girls are inmates of Special Schools for the Blind. Two boys suffering from Word Blindness have been discovered in the schools. This is a peculiar condition where vision is practically normal except for written or printed matter. The centre governing this mental function in the brain in these cases, is undeveloped, so that, although the subject can see alright, he is quite unable to piece letters together and to form words. Speech is not affected. It is for the written word only that mental blindness is present.

*Deaf, Dumb or Partially Deaf and Dumb.*

Four boys and three girls who are partially deaf are attending the Elementary Schools. In one boy and two girls speech has not yet occurred, but they are too young to say definitely that they are dumb. Some children are very late in speaking, but after a period at school they rapidly develop in a perfectly normal manner. Eleven children are inmates of Special Schools.



## PROVISION OF MEALS.

No meals were provided during 1923.

## SWIMMING INSTRUCTION, 1923.

I am indebted to the Secretary of Education for the following report.

The swimming tests for the award of Certificates as a result of the instruction given to children during the season 1923, were carried out at the Public Baths on Monday, the 1st October, 1923, for the girls, and Tuesday, 2nd October, 1923, for the boys.

The period of instruction this year was 22 weeks, as compared with 21 weeks last year.

*Girls.*—The average attendance of girls has been 261 per week throughout the session, as compared with 241 last year; and out of 110 girls tested for Certificates, 104 satisfied the examiners. Last year 84 girls were examined, and 81 qualified for Certificates. The distance of the test is one length of the bath (25 yards).

*Boys.*—The average attendance of boys has been 538 per week throughout the session, as compared with 497 per week last year, and of the 165 boys presented for examination, 161 qualified for Certificates of Proficiency. Last year, 134 boys who were tested for the Certificate satisfied the examiners. The distance of the test is  $1\frac{1}{2}$  lengths of the bath (about 37 yards).

The main faults appeared to be (a) insufficient leg action; (b) incorrect breathing leading to early exhaustion.

## EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

Fifty-five boys under 14 years, and one boy over 15 years, were examined under Section 15 of the Education Act, 1918.

Fifty-three boys were to be employed in the delivery of newspapers, two in the delivery of milk, and one, over 15 years, in the street trading of newspapers.

Forty-four of the applicants were physically fit; eight showed some valvular defect of the heart; and four showed a degree of Bronchitis. No applicants were rejected.

The average age of the boys was 12.8 years, and the usual hours of employment were from 7 to 8 in the mornings, with a longer period on Saturdays. The lowest income was 1/- per week; the highest 5/-, with an average of 2/7. The boy engaged in street trading earned 10/- per week.

The educational standard of these boys, as a whole, was rather below normal, as was their physique.

A summary of the results found since the examination of these children was commenced in 1921 is of interest.

<i>Number Examined</i> —Boys, 244.	Girls, 14.
<i>Number Rejected</i> —2.	
<i>Defects Found</i> —Heart, 11.	Lungs, 13.
Skin, 3.	Rickets, 3.
Other Defects, 6.	Total Defects, 36.

The percentage number of children found defective was, therefore, 13.9.

#### DEATHS IN CHILDREN OF SCHOOL AGE.

TABLE XXXVII.

Cause.	Boys.	Girls.
Septicaemia ... ..	1	—
Bronchitis ... ..	—	1
Broncho-Pneumonia ... ..	3	—
Measles ... ..	1	—
Influenza ... ..	1	—
Scarlet Fever ... ..	—	1
Pulmonary Tuberculosis ... ..	—	1
Rheumatism ... ..	2	—
Pernicious Anaemia ... ..	—	1
Endocarditis ... ..	1	—
Syncope and Heart Disease ... ..	—	1
Meningitis ... ..	1	2
Cerebral Haemorrhage ... ..	—	1
Nephritis ... ..	—	1
Diseases of the Ear ... ..	—	1
Accidents and Negligence... ..	2	1
	—	—
	12	11

Taking the School Population as 8,454, the Death Rate was 2.7 per 1,000. In 1922, it was 1.68 per 1,000.

#### SECONDARY SCHOOL.

##### ROUTINE MEDICAL INSPECTION.

The medical inspection of school children in the Wheelwright Grammar School was decided upon towards the end of the year. A scheme was drawn up by the School Medical Officer and approved of by the Education Committee. Under this scheme, the children could be examined either by their private medical practitioners or by the officers of the School Medical Services. Medical Inspection was entirely voluntary.

The Entrants, *i.e.*, children who had entered at the Winter Term were only examined. Thirty-eight boys and 36 girls were submitted, of these, six boys and two girls were examined by private medical men, who sent in the cards to the School Medical Officer upon completion of the examination.

Under the scheme, if the children were examined by the School Medical Staff, the girls were examined by the Lady Assistant School Medical Officer, the boys by the School Medical Officer.

#### RESULTS OF EXAMINATIONS.

##### *Boys:—*

The following defects were found:—

Defective Vision, 5; (two were wearing spectacles); Mouth breather, 1; Enlarged Tonsils, 2; Enlarged Glands (neck), 3; Nutrition under Normal, 3; Skin Complaints, 2; Round Shoulders, 1; Speech Defects, 1.

##### *Girls:—*

The following defects were found:—

Defective Vision, 24, of these 13 were slight and did not require spectacles. Three girls suffered from squint, and two girls were practically blind in one eye. Enlarged Tonsils, 2; Enlarged Glands (neck), 2; Bronchitis, 3; Nutrition under Normal, 5; Nits in Hair, 2; Slight Deformities, 3; Anaemia, 8.

Two girls showed abnormalities of the catamenia.

In the case of the boys, seven parents attended the examination. In the girls, 27 attended.

The numbers examined up to the present are too small to warrant drawing any comparisons between the Elementary and the Secondary Schools.

#### SPECIAL INVESTIGATIONS.

Two special enquiries were commenced in 1923, and will be continued. One was in relation to stammering, and the number of children so afflicted in the schools. The other was an Assessment of Physical Fitness by the Dreyer Method.

Both these investigations are by no means completed, but I have thought it expedient to include in this Report a summary of the findings as far as they have gone.

#### STAMMERING.—SPEECH DEFECTS.

Twenty-four boys and 13 girls have been examined.

Before considering the results found, a brief summary of the definitions is desirable.

There are three main defects of speech :—

(i.) Stammering, which is due to an inability to control the muscles of articulation. This is mostly the result of ineffective mental control.

(ii.) Stuttering, due to defective respiration leading to rapid repetition of syllables before subsequent ones can be enunciated.

(iii.) Lalling, a retention of the baby-like pronunciation.

This defect is mainly observed in younger children, and tends to clear up with education. Stuttering and stammering on the other hand, do not generally tend to clear up without special care and instruction. The stutterer invariably repeats his syllables in rapid and quick succession, resorting to associated movements of the limbs, face or eyes to help him. The stammerer, on the other hand, cannot begin. Stuttering and stammering can be associated.

The chief causes of Speech Defects are :—(1) Heredity. This is the most severe type as a rule. (2) Fright. (3) Illness. (4) Mimicry.

Up to the present, the investigation shows the following results :—

TABLE XXXVIII.

				Boys.	Girls.	Total.	Percentages.		Total.
Educationally Backward ...				6	4	10	25.0	30.7	27.85
Age when Defect first appeared :									
1 to 5 years ...				18	9	27	75.0	69.3	72.15
5 to 10 years ...				4	4	8	16.6	30.7	23.65
10 to 14 years ...				2	—	2	8.4	—	8.40
Nature of Defect :—									
Stuttering ...				12	6	18	50.0	46.1	48.05
Stammering ...				3	4	7	12.5	30.7	21.60
Lalling ...				9	3	12	37.5	23.2	30.35
Type of Syllable in which defect appears :—									
More than one may be present in the same child.									
Labials ...				14	5	19	58.3	38.5	48.4
Dentals ...				18	9	27	75.0	69.2	72.1
Linguals ...				10	2	12	42.3	15.4	28.85
Gutterals ...				9	4	13	37.5	30.7	34.10
Associated movement of Limbs, etc. present				6	2	8	25.0	15.4	20.20
Control over defect upon Correction :—									
No ...				11	9	20	49.0	69.2	59.10
Yes ...				13	4	17	54.1	30.7	42.40
Faulty Breathing present ...				17	6	23	70.8	46.1	58.45
History of Nervous Disease or Fright ...				9	4	13	37.5	30.7	34.10
Familial Characteristic ...				5	3	8	20.8	23.2	22.00

In a comparatively small number of cases, it therefore seems that educational backwardness is not a very prominent characteristic, though the percentage is higher than that found in normal school children. In the majority of cases, the speech defect was first noticed before school age. This is what is to be expected. 32%, however, came on after commencing school. These were all cases of stutter or stammer, or both. Stuttering was the commonest defect. Lalling was confined to children under 8 years of age. The most fatal type of word sound was the dental. This is interesting. The integrity of the teeth, and formation of the hard palate are controlling factors in the production of these sounds. Again, I believe, these sounds are the last to be perfected in normal speech, and the first to disappear in any disorders affecting speech. Linguals were the least difficult. The figures are, however, too small to enable any definite conclusion to be drawn. The disparity between Dentals and Linguals, is, however, great enough to comment upon.

Faulty breathing, the great cause of stammer, was present in over 58%. By correction of breathing faults, stammer can be overcome. This was abundantly proved in the results obtained in a Stammerers Special Class, for which I was responsible medically when I was at Swansea. The teacher, by his insistence upon correct breathing, and by exercises for the development and training of the respiratory muscles, was able to correct completely, after a few months' time, most severe cases of stammering of many years' duration.

A history of nervous shock as the origin of the trouble, was elicited in 34%, and in 22% Speech Defect was a familiar characteristic.



## ASSESSMENT OF PHYSICAL FITNESS.

TABLE XXXIX.

No.	Sex	Age	Educational Ability.	Physical Health.	Home Conditions.	Clothing and Footgear.	Chest Measurement.	Normal Chest Measurement	Weight.	Trunk Height.	Per Cent. Variation of Normal Weight.
1	M.	11	Backward	Bronchitis	Poor	Dirty and Ragged	23.5	inches. 22.21	lbs. 48	inches. 24.5	Normal
2	M.	12	Poor	Normal	Average	Satisfactory	26	25.48	73	27.6	+ 8.9%
3	M.	13	Poor	Chorea	Poor	Satisfactory	26.5	27.2	75	29.2	Normal
4	M.	7	Fair	Bronchitis	Good	Very good	23	22.2	38	24.5	-19.1%
5	M.	6	Fair	Bronchitis	Fair	Satisfactory	23.5	22.7	43.5	25	-12.9%
6	M.	8	Average	Normal	Average	Satisfactory	23.5	26.01	56.75	28.2	-6.6%
7	M.	8	Average	Chorea	Good	Satisfactory	24.25		55.25	27.5	-8.8%
8	M.	6	Seldom at School	Bronchitis and Anaemia	Good	Very good	20.75		35.25	22.6	-30.5%
9	M.	6	Seldom at School	Hemiplegia	Poor	Satisfactory	22.75		41	23.1	-1.2%
10	M.	5	Poor (fitness)	Anaemia and Bronchitis	Poor	Satisfactory	21.5		37.5	23.6	-7%
11	F.	12	Poor	Organic Heart Disease	Fair	Satisfactory	26.5	26.36	64.75	30.1	-26.7%
12	F.	11	Good	Normal	Good	Very good	22.5	22.95	51.5	25.75	Normal
13	F.	5	Good	Bronchitis	Good	Satisfactory	22.0	20.72	39.5	23	-6.7%
14	F.	12	Average	Normal	Good	Very satisfactory	30.5	28.84	94	33.2	-29.4%
15	F.	9	Good	Rheumatic	Good	Good	22.5	22.55	48	25.25	-4.4%
16	F.	5	Average	Rickets	Poor	Satisfactory	20.5	19.49	30.5	21.5	-7.9%
17	F.	12	Backward	Chorea	Poor	Satisfactory	26	24.76	64.5	28	-15.7%
18	F.	13	Good	Bronchitis and Anaemia	Fair	Satisfactory	27.5	25.96	75	29.4	-18.1%
19	F.	10	Backward	Anaemia	Fair	Satisfactory	23.5	23.56	54.75	26.5	-6.6%
20	F.	11	Average	Anaemia	Good	Satisfactory	25	23.15	57.5	26.1	-10.1%
21	F.	6	Good	Anaemia	Good	Satisfactory	23.5	21.83	38.5	24.4	-25.5%
22	F.	7	Backward	Bronchitis and Anaemia	Bad	Bad	23.75	21.93	38.5	24.6	-27.6%
23	F.	11	Average	Anaemia	Fair	Satisfactory	24.0	24.36	61.7	27.5	-4.2%
24	F.	—	Poor	Bronchitis	Fair	Satisfactory	23.25	21.83	38	24.4	-24.9%
25	F.	8	Good	Normal	Good	Satisfactory	23.25	23.46	52.25	26.6	-9.2%
26	F.	13	Average	Normal	Fair	Satisfactory	26.5	26.36	78	30.0	-11.6%
27	F.	6	Poor	Bronchitis	Good	Satisfactory	20.75	19.49	31.75	21.5	-6.4%
28	F.	12	Poor	Anaemia and Bronchitis	Average	Satisfactory	28.25	26.16	84	29.75	-14.6%
29	F.	9	Backward	Organic Heart Disease	Fair	Satisfactory	21.5	20.72	34	23.0	-15.1%
30	F.	13	Good	Bronchitis	Fair	Satisfactory	27.5	26.06	85	29.7	-8.4%

From the comparatively small numbers considered, the following points seem to come forward. The average chest measurement of the children is greater than normal, but their average weight is, as a whole, considerably below. In cases of severe chronic disability, the percentage variation of normal weight is great.

Chest measurement, taken by itself, is not a measure of fitness. Definite relationships between the weight of the body, the length of the trunk and the circumference of the chest do exist, and there is also a definite uniformity between these and the vital capacity of the lungs.

In an exhaustive enquiry into the grouping of people in various walks of life, it was found that the groups showing the finest development contained members of the Army and Navy, the Police, Athletes, Public Schoolboys, Fire Brigade, Blacksmiths and Boilermakers. In the next group came Professional Men, Business men, Railway men and Secondary School Children. In the worst group were placed Tailors, Shopkeepers, Printers, Clerks, Painters, Elementary School children and Factory Children.

TABLE I.—RETURN OF MEDICAL INSPECTIONS.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections

Entrants	...	...	...	617
Intermediates	...	...	...	961
Leavers	...	...	...	1436
				—
Total	...	...	...	3014

Number of other Routine Inspections.

B.—OTHER INSPECTIONS.

Number of Special Inspections	...	...	915
Number of Re-Inspections	...	...	2483
			—
Total	...	...	3398

TABLE II.—RETURN OF DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION IN 1923.

Disease or Defect	Routine Inspections.		Specials.	
	Number referred for Treatment	Number requiring to be kept under observation, but not referred for treatment.	Number referred for Treatment	Number requiring to be kept under observation, but not referred for treatment
Malnutrition ... ..	...	220	...	6
Uncleanliness—Head ... ..	25	...	...	...
Body ... ..	...	412	...	...
Ringworm—Head ... ..	7	...	2	...
Body ... ..	...	...	1	...
SKIN—Scabies ... ..	6	...	...	...
Impetigo ... ..	4	...	3	...
Other Diseases (Non-Tubercular) ...	18	...	...	...
EYE—				
Blepharitis ... ..	...	...	...	...
Conjunctivitis ... ..	3	...	...	...
Keratitis ... ..	...	...	...	...
Corneal Ulcer... ..	...	...	...	...
Corneal Opacities ... ..	...	4	...	...
Defective Vision ... ..	240	99	40	...
Squint ... ..	40	...	17	...
Other Conditions ... ..	...	...	...	...
EAR—				
Defective Hearing ... ..	16	13	15	3
Otitis Media ... ..	19	...	20	...
Other Ear Diseases ... ..	...	...	2	...
NOSE AND THROAT—				
Enlarged Tonsils ... ..	16	40	8	...
Adenoids ... ..	6	...	3	...
Enlarged Tonsils and Adenoids ...	12	...	12	...
Other Conditions ... ..	6	...	24	12
Enlarged Cervical Glands (Non-Tubercular)	2	30	3	10
Defective Speech ... ..	...	17	...	3
Teeth—Dental Diseases ... ..	24	...	4	...
Heart and Circulation—				
Heart Disease—Organic ... ..	7	10	4	3
Functional ... ..	...	37	1	6
Anæmia ... ..	42	36	25	2
LUNGS—				
Bronchitis ... ..	50	256	32	120
Other Non-Tubercular Diseases ...	5	5	5	...
TUBERCULOSIS—				
Pulmonary—				
Definite ... ..	4	...	4	...
Suspected ... ..	...	14	...	13
Non-Pulmonary—				
Glands ... ..	1	..	2	...
Spine ... ..	...	...	...	...
Hip ... ..	...	...	...	...
Other Bones and Joints ... ..	...	...	...	...
Skin ... ..	1	...	1	...
Other Forms ... ..	...	...	...	...
NERVOUS SYSTEM—				
Epilepsy... ..	...	1	...	...
Chorea ... ..	3	...	15	...
Other Conditions ... ..	1	...	3	...
DEFORMITIES—				
Rickets ... ..	8	12	3	10
Spinal Curvature ... ..	...	10	1	2
Other Forms ... ..	4	10	2	12
Other Diseases and Defects ... ..	...	160	9	53

No. of Individual Children having defects which required treatment or to be kept under observation, 498, i.e., 16.52 per cent.

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Group.	Number of Children.		Percentage of Children found to require Treatment.
	Inspected.	Found to require Treatment.	
1.	2.	3.	4.
CODE GROUPS:—			
Entrants ... ..	617	115	18.63
Intermediates ... ..	961	200	20.81
Leavers ... ..	1436	183	12.73
Total (Code Groups) ...	3014	498	16.52
Other Routine Inspections ...			

TABLE III.—RETURN OF EXCEPTIONAL CHILDREN IN THE AREA.

			Boys.	Girls.	Total.
Blind (including partially blind).	(I.) Suitable for training in a School or Class for the totally blind	Attending Certified Schools or Classes for the Blind ... ..	3	3	6
		Attending Public Elementary Schools ... ..	...	...	...
		At other Institutions ... ..	...	...	...
		At no School or Institution...	...	...	...
	(II.) Suitable for training in a School or Class for the partially blind	Attending Certified Schools or Classes for the blind ... ..	2	5	7
		Attending Public Elementary Schools ... ..	...	...	...
		At other Institutions ... ..	...	...	...
		At no School or Institution ...	...	...	...
Deaf (including deaf and dumb and partially deaf.)	(I.) Suitable for training in a School or Class for the totally deaf or deaf and dumb	Attending Certified Schools or Classes for the Deaf ... ..	...	...	11
		Attending Public Elementary Schools ... ..	...	...	...
		At other Institutions ... ..	...	...	...
		At no School or Institution ...	...	...	...
	(II.) Suitable for training in a Class or School for the partially deaf.	Attending Certified Schools or Classes for the Deaf ... ..	...	...	...
		Attending Public Elementary Schools ... ..	4	3	7
		At other Institutions ... ..	...	...	...
		At no School or Institution ...	...	...	...
Mentally Defective.	Feeble-minded (Cases not notifiable to the Local Control Authority).	Attending Certified Schools for Mentally Defective Children ...	...	...	...
		Attending Public Elementary Schools ... ..	...	6	6
		At other Institutions ... ..	1	4	5
		At no School or Institution ...	5	2	7
	Notified to the Local Control Authority during the year	Feeble-minded ... ..	...	...	...
		Imbeciles ... ..	...	...	...
		Idiots ... ..	...	...	...







TABLE IV. RETURN OF DEFECTS TREATED DURING  
THE YEAR ENDED 31/12/23.

TREATMENT TABLE.

Group I.—Minor Ailments (excluding Uncleanliness, for which  
see Group V.)

Disease or Defect. (1)	Number of defects treated or under treatment during the year.		
	Under the Authority's Scheme. (2)	Other- wise. (3)	Total. (4)
SKIN—			
Ringworm—Scalp ... ..	69	3	72
Ringworm—Body ... ..	51	...	51
Scabies ... ..	20	1	21
Impetigo ... ..	219	...	219
Other Skin Disease ... ..	198	...	198
MINOR EYE DEFECTS— (External and other, but excluding cases falling in Group II. ... ..)	174	2	176
MINOR EAR DEFECTS—	96	2	98
MISCELLANEOUS— (e.g., minor injuries, bruises, sores, chilblains, etc.) ... ..	429	20	449
	1256	28	1284

Group II.—Defective Vision and Squint (excluding Minor Eye  
Defects treated as Minor Ailments—Group I.

	Number of Defects dealt with.			
	Under the Authority's Scheme. (2)	Submitted refraction by private practi- tioner or at Hospital apart from the Authority's Scheme. (3)	Other- wise. (4)	Total. (5)
Errors of Refraction (including Squint). Operations for Squint should be recorded separately in the body of the Report ... ..	349	32	11	392
Other Defect or Disease of the eyes (excluding those recorded in Group I. ... ..)	...	1	...	1
Total ... ..	349	33	11	393

GROUP II—*Continued.*

Total Number of Children for whom Spectacles were prescribed :

- (a) Under the Authority's Scheme ... 254  
 (b) Otherwise ... .. 39

Total Number of Children who obtained or received Spectacles :

- (a) Under the Authority's Scheme ... 225  
 (b) Otherwise ... .. 39

## GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

## Number of Defects.

Received Operative Treatment			Received other Forms of Treatment.	Total Number Treated.
Under the Authority's Scheme : Clinic or Hospital	By Private Practitioner or Hospital apart from the Authority's Scheme	Total		
2	80	82	5	87

## GROUP IV.—DENTAL DEFECTS.

(1). Number of children who were :—

(a) Inspected by the Dentist :—					
Routine Age Groups	Aged	5	...	...	Total ... 666
		6	...	...	
		7	...	...	
		8	...	...	
		9	...	...	
		10	...	...	
		11	...	...	
		12	...	...	
		13	...	...	
		14	...	...	
Specials	...	...	...	...	485
Grand Total ...					1151

Found to require treatment ... 1002  
 Actually treated ... .. 698  
 Re-treated during the year as a  
 result of periodical examination 92

GROUP IV—*Continued.*

(2) Half-days devoted to	$\left\{ \begin{array}{l} \text{Inspection} \dots 8 \\ \text{Treatment} \dots 134 \end{array} \right\}$	Total ...	142
(3) Attendances made by children for treatment			1080
(4) Fillings... ..	$\left\{ \begin{array}{l} \text{Permanent Teeth} \quad 597 \\ \text{Temporary Teeth} \quad \text{—} \end{array} \right\}$	Total ...	597
(5) Extractions ... ..	$\left\{ \begin{array}{l} \text{Permanent Teeth} \quad 269 \\ \text{Temporary Teeth} \quad 1142 \end{array} \right\}$	Total ...	1411
(6) Administration of general anaesthetics for extractions		...	575
(7) Other operations ...	$\left\{ \begin{array}{l} \text{Permanent Teeth} \quad 170 \\ \text{Temporary Teeth} \quad \text{—} \end{array} \right\}$	Total ...	170

## GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

- (1) Average number of visits per School made during the year by the School Nurses ... 11
- (2) Total number of examinations of children in the schools by School Nurses ... .. 20983
- (3) Number of individual children found unclean... 226
- (4) Number of children cleansed under arrangements made by the Local Education Authority ... .. 24 (out-bathing)
- (5) Number of Cases in which legal proceedings were taken :—
  - (a) Under the Education Act, 1921 ... None
  - (b) Under School Attendance Bye-laws ... None

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